

Figure 1

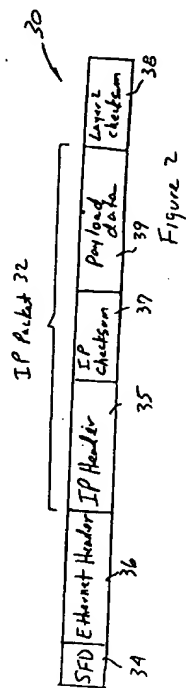


Figure 2

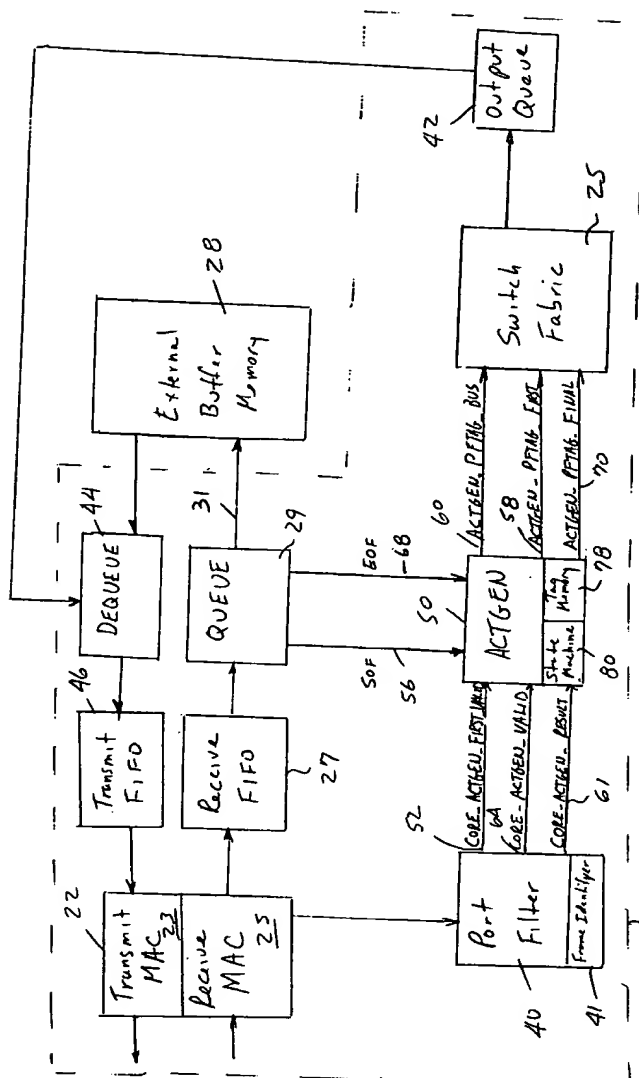


Figure 3

50

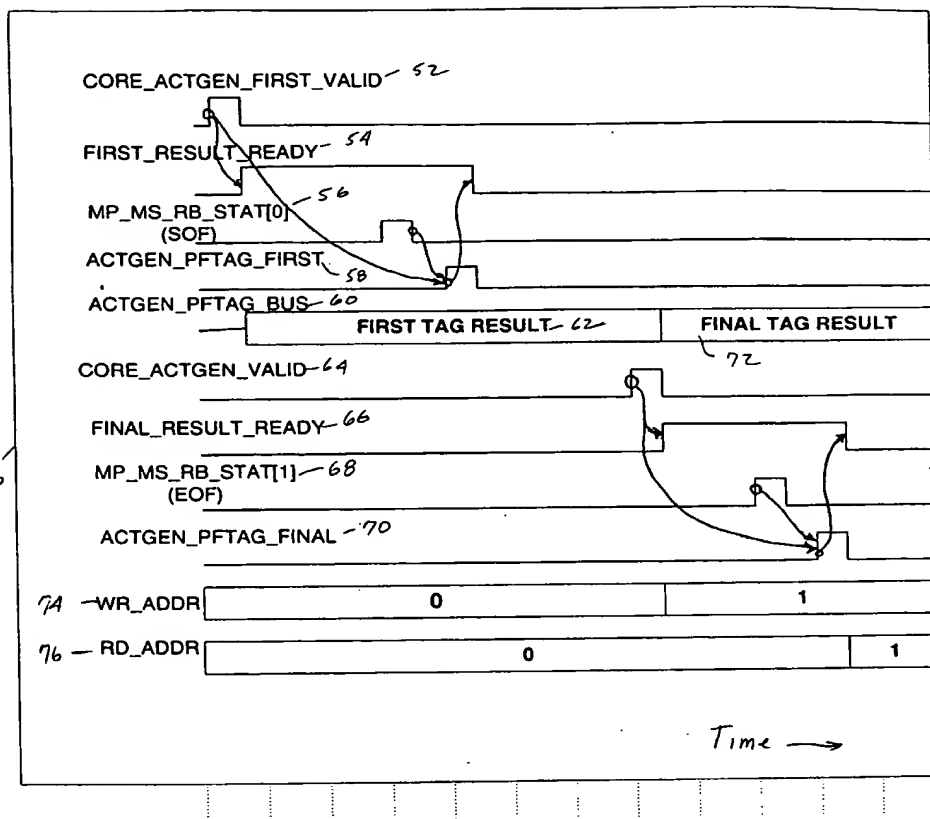


Figure 4

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graph TD
    92[RESET] --> 90{Start of frame}
    90 -- N --> 92
    90 -- Y --> 94[START]
    94 --> 96{CORE_ACTGEN_FIRST_VALID  
OR  
FIRST_RESULTS_READY}
    96 -- N --> 94
    96 -- Y --> 98([ACTGEN_PFTAG_FIRST])
    98 --> 100[WAIT_EOF]
    100 --> 102{End of frame}
    102 -- N --> 100
    102 -- Y --> 104[WAIT_FINAL]
    104 --> 106{CORE_ACTGEN_VALID OR  
FINAL_RESULTS_READY}
    106 -- N --> 104
    106 -- Y --> 108([ACTGEN_PFTAG_FINAL])
    108 --> 92

```

Figure 5